| Index | of Claims |  |
|-------|-----------|--|
|       |           |  |

| Application/Control No. | Applicant(s)/Patent under Reexamination | _ |
|-------------------------|---|---|
| 10/823,498              | KOTZ ET AL.                             |   |
| Examiner                | Art Unit                                |   |

| ' | Rejected | -  | (Through numeral)<br>Cancelled |
|---|----------|----|--------------------------------|
| = | Allowed  | 4. | Restricted                     |

| N | Non-Elected  |
|---|--------------|
| _ | Interference |

Saqib J. Siddiqui

| A | Appeal   |
|---|----------|
| 0 | Objected |

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|              |  | ш               | _        |  |          |          | ,            |          | _        |                 |  |  |
|--------------|--|-----------------|----------|--|----------|----------|--------------|----------|----------|-----------------|--|--|
| Cla          | im                                     | Date            |          |  |          |          |              |          |          |                 |  |  |
| Final        | Original                               | 90/6/8          |          |  |          |          |              |          |          |                 |  |  |
|              | 1                                      | J               | $\vdash$ | $\vdash$   | $\vdash$ | -        | _            | $\vdash$ | $\vdash$ | Н               |  |  |
| <u> </u>     | 2                                      | Ť               | ┢        | $\vdash$   | ┢╾       | $\vdash$ | _            | -        | -        | Н               |  |  |
|              | 3                                      | H               | _        | _  | ┢        | $\vdash$ |              |          |          | Н               |  |  |
|              | 4                                      |                 |          | <u> </u>   |          | -        |              |          |          | Н               |  |  |
|              | 1<br>2<br>3<br>4<br>5                  | П               |          | Г  |          |          |              |          |          |                 |  |  |
|              | 6                                      | П               |          |  |          |          |              |          |          |                 |  |  |
|              | 7                                      | Ц.              |          | <u> </u>   |          |          |              |          |          | Щ               |  |  |
|              | 8                                      | Ц               | _        | L  | _        | _        |              | _        |          |                 |  |  |
|              | 9                                      | H               | _        | <u> </u>   | <u> </u> | <u> </u> |              |          | _        | Ш               |  |  |
|              | 10                                     | H               | _        | ⊢  | <u> </u> | <u> </u> |              | -        | H        | Н               |  |  |
|              | 12                                     | H               | $\vdash$ | ├-   | ⊢        | ⊢        | -            | -        | $\vdash$ | Н               |  |  |
| -            | 10<br>11<br>12<br>13<br>14<br>15<br>16 | H               | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$     |          | $\vdash$ | $\vdash$        |  |  |
|              | 14                                     | 1               | $\vdash$ | $\vdash$   | ╁╌       | $\vdash$ | <del> </del> | ┢╾       | H        | H               |  |  |
|              | 15                                     | $\dag \uparrow$ | $\vdash$ | $\vdash$   | $\vdash$ | $\vdash$ | Т            | Т        | $\vdash$ | Н               |  |  |
|              | 16                                     | $\dag \uparrow$ | $\vdash$ | Г  | Η        | Г        | <b></b>      | Г        | Т        | М               |  |  |
|              | 17                                     | П               |          |  |          |          |              |          |          | П               |  |  |
|              | 18<br>19                               | П               |          |  |          |          |              |          |          |                 |  |  |
|              | 19                                     | Ш               |          |  |          |          |              |          |          |                 |  |  |
|              | 20                                     | Ш               |          |  |          |          |              |          |          | Ш               |  |  |
|              | 21                                     | 1               | <u> </u> |  |          |          | L_           |          | <u> </u> | Ш               |  |  |
|              | 22                                     | 1               |          |  |          | <u>.</u> |              | _        | L.       | Ш               |  |  |
|              | 23                                     | <u> </u>        | -        | <u> </u>   | <u> </u> | _        | _            | _        | <u> </u> | Н               |  |  |
|              | 24<br>25                               | $\vdash$        | $\vdash$ | -  |          | _        |              | $\vdash$ | -        | $\vdash$        |  |  |
| -            | 26                                     | $\vdash$        | $\vdash$ |  | -        | $\vdash$ | -            | $\vdash$ | _        | Н               |  |  |
| ├─           | 26<br>27                               | $\vdash$        | H        |  | -        | _        |              | _        | _        | Н               |  |  |
| $\vdash$     | 28                                     | _               |          |  |          |          |              | _        |          | Н               |  |  |
|              | 29                                     |                 |          |  |          |          |              |          |          | П               |  |  |
|              | 29<br>30                               |                 |          |  |          |          |              |          |          |                 |  |  |
|              | 31                                     |                 |          |  |          |          |              |          |          |                 |  |  |
|              | 32                                     | L               | _        | L  | <u> </u> | <u> </u> | L            |          | L        | Ш               |  |  |
|              | 33                                     | $\vdash$        | $\vdash$ | L  | ⊢        | <u> </u> | $\vdash$     | <u> </u> | <u> </u> | Ш               |  |  |
| <u> </u>     | 34<br>35                               | ┝               | <u> </u> | ⊢  | ├-       | <u> </u> | ⊢            | H        | L        | $\vdash \vdash$ |  |  |
|              | 36                                     | ┢               | -        | -  | -        | -        | -            | $\vdash$ | $\vdash$ | $\vdash\vdash$  |  |  |
|              | 37                                     | -               | -        | $\vdash$   | ┢╌       | $\vdash$ | H            | -        | ┢        | $\vdash\vdash$  |  |  |
|              | 38                                     | H               | 一        | $\vdash$   | $\vdash$ | $\vdash$ | $\vdash$     | H        | -        | Н               |  |  |
|              | 39                                     | Г               | Г        | <del>                                     </del> | $\vdash$ | Т        | <u> </u>     | Г        | _        | Н               |  |  |
|              | 40                                     |                 | Γ        | Ī  | Γ        | Г        |              |          | П        | П               |  |  |
|              | 41                                     |                 |          |  |          |          |              |          |          |                 |  |  |
|              | 42                                     |                 |          |  | L        |          |              |          |          |                 |  |  |
|              | 43                                     | <b> </b> _      | L-       | <u> </u>   | <u> </u> | <u> </u> | L            | L        | L        | Ш               |  |  |
|              | 44                                     | ⊢               | $\vdash$ | <u> </u>   | <u> </u> | <u> </u> | L            | L        |          | Ш               |  |  |
| <b> </b>     | 45<br>46                               | ⊢               | <u> </u> | <u> </u>   | <u> </u> | L        | ļ            | L        | _        | Н               |  |  |
| <del></del>  | 46                                     | ├               | $\vdash$ | -  | ├-       | <u> </u> | $\vdash$     | H        | $\vdash$ | $\vdash$        |  |  |
| <u> </u>     | 48                                     | $\vdash$        | $\vdash$ | $\vdash$   | ├─       | ⊢        | $\vdash$     | $\vdash$ |          | $\vdash$        |  |  |
| <del> </del> | 49                                     | $\vdash$        | $\vdash$ | $\vdash$   | ┝        | H        | $\vdash$     | H        | -        | $\vdash$        |  |  |
| <del></del>  | 50                                     | Ι               | -        |  | $\vdash$ | -        | $\vdash$     |          | -        | Н               |  |  |

| la       | im       |          |         |        |                | Dat      | e            |  |              |  | ] | Cla      | im       | Γ        |          |          | [                 | Date   | •        |          |          |          |
|----------|----------|----------|---------|--------|----------------|----------|--------------|--|--------------|--|---|----------|----------|----------|----------|----------|-------------------|--|----------|----------|----------|----------|
| П        |          |          | Т       |        | Τ              |          | Γ            |  |              |  | İ |          |          |          |          |          |                   |  |          |          |          |          |
|          | Ë        | 90/      |         |        |                |          |              |  |              |  |   | al       | ing      |          |          |          | ŀ                 |  |          |          |          |          |
|          | Original | 90/6/8   |         | 1      |                |          |              | l  |              |  |   | Final    | Original |          |          |          |                   |  |          |          |          |          |
|          |          |          | 1       |        |                |          |              |  |              |  |   |          |          |          |          |          |                   |  |          |          |          |          |
|          | 1        | 1        |         |        |                |          |              |  |              |  |   |          | 51       |          |          |          |                   |  |          |          |          |          |
|          | 3        | L        |         |        |                | L        |              |  | _            |  |   |          | 52       |          |          |          |                   | Ш  |          |          |          |          |
| ╝        | 3        |          |         |        |                |          |              |  | _            | L  |   |          | 53       |          |          |          |                   |  |          |          |          |          |
| _        | 4        |          |         | 上      | <u> </u>       |          | L            |  | L            | L  |   |          | 54       |          |          |          | L                 |  |          |          | Ш        |          |
| _        | 5<br>6   | Ц        | _       | 上      | ┸              |          |              | _  |              |  |   |          | 55       |          |          |          |                   |  |          |          |          |          |
| ᆜ        | 6        |          | $\perp$ | _      | L              | _        | L            | <u> </u>   |              | <u></u>  |   |          | 56       |          |          |          |                   |  |          |          |          |          |
| ╝        | 7        | Ц        | _       | 丄      | <u> </u>       | <u> </u> |              |  |              | L  |   |          | 57       |          |          |          |                   | _  |          |          |          |          |
| _        | 8        | Ц        | ┺       | ┺      | 1_             | ┖        | _            | L  | lacksquare   | _  |   |          | 58       |          |          |          |                   |  |          |          |          |          |
| _        | 9        | Ц        | 1_      | _      | 1_             | <u> </u> |              | _  | L            | _  |   |          | 59       |          |          |          |                   |  |          |          |          |          |
| _        | 10       | Ц        | 1       | ┸      | ┖              | <u> </u> | L            |  | L            | _  |   |          | 60       |          |          | _        | _                 | L  |          | _        |          |          |
| 4        | 11       | Ц        | _       | ┺      | ↓_             | ↓_       | L            | <u> </u>   | ᆫ            | <u> </u>   |   |          | 61       |          |          |          | L                 | _  |          |          |          |          |
| _        | 12       | Ц        | $\perp$ | _      | ┖              | <u> </u> | _            | L  | L            | <u> </u>   |   |          | 62       |          |          |          | _                 | _  |          |          |          |          |
| 4        | 13       | 4        | 4_      | ↓_     | 4_             | ↓_       | <u> </u>     | <u> </u>   | <u> </u>     | <u> </u>   |   | $\Box$   | 63       | _        |          | _        | _                 | _  |          |          | Ш        |          |
| _        | 14       | 4        | _       | 1      | ┸              | ↓_       | ᆫ            | L_   | <u> </u>     | <u> </u>   |   |          | 64       |          |          |          | _                 | L  |          |          | Ш        |          |
| 4        | 15       | Ц        | ╄       | ╄      | <u> </u>       | ↓_       | ļ            | <u> </u>   | <u> </u>     | <u> </u>   |   |          | 65       |          |          |          | <u> </u>          |  |          |          |          |          |
| 4        | 16       | Ц        | _       | 1      | ╄.             | <u> </u> |              | _  | _            | <u> </u>   |   |          | 66       | $\vdash$ | _        | _        | <u> </u>          | _  | _        |          |          |          |
| _        | 17       | Ц        | 4_      | 1_     | 1_             | ↓_       | L            | <u> </u>   | <u> </u>     | <u> </u>   |   |          | 67       |          | _        | $\vdash$ | <u> </u>          | _  |          | _        |          | _        |
| 4        | 18       | Ц        | $\perp$ | ╄      | ↓_             | ╄        | <u> </u>     | <u> </u>   | <u> </u>     | <u> _</u>  |   |          | 68       |          |          | _        | <u> </u>          | ļ  | _        |          |          |          |
| 4        | 19       | Ц        | _       | -      | ╄              | ┞        | _            | _  |              | <u> </u>   |   |          | 69       |          |          | Ŀ        | $ldsymbol{f eta}$ | <u> </u>   |          |          |          |          |
| 4        | 20       | Ц        | ╄       | $\bot$ | ┺              | ╀-       | <u> </u>     | <u> </u>   | <u> </u>     | <u> </u>   |   |          | 70       | L        | _        | <u> </u> | <u> </u>          | <u> </u>   | _        | _        | Щ        | L        |
| 4        | 21       | 1        | 4_      | ╀      | ╄              | ╀        | <u> </u>     | ļ  | <u> </u>     | L  |   |          | 71       | <u> </u> |          | <u> </u> | <u> </u>          | <u> </u>   | _        |          |          |          |
| 4        | 22       | 1        | +       | ↓_     | ╄              | ╄-       | <u> </u>     | <u> </u>   | _            | <u> </u>   |   |          | 72       | _        |          |          | <u> </u>          | <u> </u>   |          |          |          |          |
| 4        | 23       | _        | +       | ↓_     | ╀              | ╀        | <u> </u>     | ┡  | ┡            | ⊢  |   |          | 73       | _        |          |          | ļ                 | <u> </u>   |          | _        |          | _        |
| 4        | 24<br>25 | _        | +       | +      | ╀              | -        | <u> </u>     | ⊢  | <u> </u>     | -  |   |          | 74       | _        | -        | <u> </u> | ├-                |  |          | _        |          | _        |
| 4        | 25       |          | ╀       | -      | ╀              | ┼        | ├            | ⊢  | ⊢            | <u> </u>   |   |          | 75       | $\vdash$ |          | _        | ⊢                 | -  | -        |          |          |          |
| -        | 26       | _        | ╀       | +-     | ╀              | +-       | <u> </u>     | H  | <u> </u>     | $\vdash$   |   | <u> </u> | 76<br>77 | $\vdash$ | -        | _        | ┝                 | ├—   | -        | _        |          | _        |
| $\dashv$ | 27<br>28 | -        | ╁╌      | +      | +              | ┿        | ├-           | -  | <del> </del> | <del> </del>                                     |   |          |          | $\vdash$ | _        | <u> </u> | ⊢                 | ⊢  | -        | _        | -        | _        |
| ┥        | 29       |          | +-      | ╁      | +-             | +-       | ⊢            | ⊢  | -            | _  |   | <u> </u> | 78       | $\vdash$ |          | _        | ⊢                 | H  | $\vdash$ | -        |          | _        |
| ┥        | 29       | H        | ╀       | ╁      | ╁              | +        | ⊢            | ├  | ⊢            | $\vdash$   |   |          | 79       | $\vdash$ | _        | $\vdash$ | ⊢                 | $\vdash$   | $\vdash$ |          | $\vdash$ | -        |
| $\dashv$ | 30<br>31 | _        | ╁       | +      | +              | +        | ⊢            | ├  | -            | $\vdash$   |   |          | 80<br>81 | -        |          | $\vdash$ | ⊢                 | ┝  |          |          |          | _        |
| $\dashv$ | 32       |          | ╁       | ╁      | ╁              | ┿        | -            | ⊢  | ┝            | <del> </del>                                     |   |          | 82       | -        | -        | -        | ⊢                 | $\vdash$   | $\vdash$ |          | $\vdash$ | $\vdash$ |
| $\dashv$ | 33       | _        | +       | +-     | ┼              | +-       | ⊢            | ┝  | ├            | -  |   |          | 83       | H        |          | ┢        | ⊢                 | H  | $\vdash$ | $\vdash$ |          | -        |
| $\dashv$ | 34       | -        | ╁       | +      | ╁              | ╁        | $\vdash$     | -  | ⊢            | H  |   |          | 84       | H        | _        | $\vdash$ | ⊢                 | H  |          | -        | -        | $\vdash$ |
| $\dashv$ | 35       | _        | ╁       | ╁      | ┿              | ╁        | <del> </del> | $\vdash$   | ┝            | ├  |   |          | 85       |          |          | ⊢        | ⊢                 | $\vdash$   |          |          |          | -        |
| ┪        | 36       | -        | ╁       | ╁      | ╁╌             | ╁        | -            | ⊢  | ┝            | -  |   | -        | 86       |          | _        | $\vdash$ | $\vdash$          |  | $\vdash$ |          | $\dashv$ | _        |
| ┥        | 37       | -        | +       | ╁      | ╁╴             | ╁        | ┢╌           | -  | ┝            | -  |   |          | 87       | -        |          | -        | $\vdash$          | -  |          | _        | Н        | _        |
| -        | 38       | H        | ╁       | ╁      | ╁              | +        | -            | ┢─   |              | H  |   | _        | 88       |          |          | $\vdash$ | $\vdash$          | $\vdash$   | Н        | _        | $\vdash$ | -        |
| ┪        | 39       | -        | ╁       | +-     | ╁              | ╁        | -            | $\vdash$   | ┝            | ├─   | l | -        | 89       |          |          | $\vdash$ | ┢                 |  |          |          | $\vdash$ |          |
| -        | 40       | Н        | ╁       | ╁      | ╁╴             | ┰        |              | -  | ⊢            | ┝  | 1 | _        | 90       |          | _        | H        | ┢                 | $\vdash$   |          |          | -1       |          |
| ┪        | 40<br>41 | -        | +       | ╁      | ╁              | ┢        | $\vdash$     | <del>                                     </del> | ┢╾           |  |   |          | 91       |          | _        | $\vdash$ | ┝                 | $\vdash$   |          | _        | -        | $\vdash$ |
| ┪        | 42       |          | +       | ╁╴     | ╁              | +        | Н            | <del>                                     </del> | ┢            | ┝  |   |          | 92       |          | _        | $\vdash$ | $\vdash$          |  | Н        |          | Н        | Н        |
| ٦        | 43       |          | ╁       | +      | ╁              | †        | $\vdash$     | $\vdash$   | $\vdash$     | <del> </del>                                     |   | <u> </u> | 93       | $\vdash$ | -        | $\vdash$ | $\vdash$          | <del>                                     </del> | $\vdash$ | _        | -        | Н        |
| 1        | 44       | -        | 1       | 1-     | +              | +        | $\vdash$     | $\vdash$   | _            | <del>                                     </del> | 1 |          | 94       | $\vdash$ | $\vdash$ | $\vdash$ |                   | $\vdash$   | Н        | $\vdash$ | Н        | Н        |
| $\dashv$ | 45       | $\vdash$ | $\top$  | +      | †-             | T        | $\vdash$     | $\vdash$   | $\vdash$     | $\vdash$   | 1 |          | 95       | $\vdash$ |          | $\vdash$ | $\vdash$          | <del>                                     </del> | $\vdash$ | _        |          | $\vdash$ |
| ┨        | 46       |          | 1       | +      | +-             | 1        | t            | $\vdash$   | $\vdash$     | Н  | 1 | -        | 96       | $\vdash$ | $\vdash$ | $\vdash$ | Ι-                | $\vdash$   | $\vdash$ | _        |          | М        |
| $\dashv$ | 47       | $\vdash$ | 1       | +      | ╁              | †        | t            | $\vdash$   | $\vdash$     | -  | 1 |          | 97       | $\vdash$ | Н        | $\vdash$ | $\vdash$          | $\vdash$   | Н        |          | $\vdash$ | Н        |
| +        | 48       | Т        | $\top$  | 1      | t              | T        | $\vdash$     | $\vdash$   | _            | _  | 1 |          | 98       | T        | Н        | Т        | T                 | T  | П        |          | $\vdash$ | П        |
| $\dashv$ | 49       | Т        | $\top$  | 1      | T              | T        | t            | ı  | $\vdash$     |  | 1 |          | 99       | П        | т        | Г        | $\vdash$          |  |          |          |          |          |
| $\dashv$ | 50       | -        | T       | 1      | T              | 1        | Г            | _  | 1            | $\vdash$   | 1 |          | 100      |          |          |          |                   |  |          |          |          | Т        |
| _        |          | _        |         |        | <del>'</del> - |          | ٠            |  |              | _  | , |          |          |          | _        |          | _                 |  |          |          |          | _        |

|             |                   |          |          |          |          |          |          |          | •        |          |
|-------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Cla         | aim               |          |          |          |          | Date     | _        |          |          |          |
| Final       | Original          |          |          |          |          |          |          |          |          |          |
|             | 101               |          |          |          |          |          |          |          |          |          |
|             | 102<br>103        |          |          |          |          |          |          |          |          |          |
|             | 103               |          | _        |          |          |          |          |          |          | Щ        |
|             | 104<br>105        | $\vdash$ |          | $\vdash$ | -        |          |          |          | -        | Н        |
|             | 105               |          | _        | -        |          |          | _        |          | -        | Н        |
|             | 107               |          |          | $\vdash$ |          |          |          | _        | -        | Н        |
|             | 107<br>108        |          |          |          |          |          |          |          |          |          |
|             | 109               |          |          |          |          |          |          |          |          |          |
|             | 110               |          | _        | _        |          |          | _        | L        | _        | Ш        |
|             | 111               |          | _        | $\vdash$ |          |          |          | _        | H        |          |
|             | 112<br>113        | H        | $\vdash$ | $\vdash$ |          | H        |          | <u> </u> | -        | $\vdash$ |
|             | 114               |          | _        | $\vdash$ | $\vdash$ | _        | $\vdash$ | $\vdash$ | ┢        | $\vdash$ |
|             | 115               |          | Т        |          |          | $\vdash$ |          | Г        | ┢        | -        |
|             | 116               |          | Г        |          |          |          |          |          |          |          |
|             | 117               |          |          |          |          |          |          |          |          |          |
|             | 118               | _        | _        | _        |          |          | L        |          | _        | Щ        |
|             | 119               | _        | <u> </u> | _        |          |          |          |          | _        | Ш        |
|             | 120               | $\vdash$ | -        | ├        | <u> </u> |          | _        | _        | $\vdash$ | Н        |
|             | 121<br>122        |          | $\vdash$ | ⊢        | $\vdash$ | $\vdash$ | _        | _        |          | H        |
|             | 123               |          | $\vdash$ | $\vdash$ | $\vdash$ |          | _        | -        | -        |          |
|             | 123<br>124        |          |          |          |          |          |          | _        | -        | H        |
|             | 125               |          |          |          |          |          |          |          |          |          |
|             | 126               |          |          |          |          |          |          |          |          |          |
|             | 126<br>127<br>128 | _        | <u> </u> | <u> </u> | L_       |          | _        | _        | ļ        | Щ        |
| -           | 128               |          | <u> </u> | <u> </u> | <u> </u> | -        |          | _        | <u> </u> |          |
|             | 129<br>130        | -        | ┝        | -        | ┝        | -        | _        | _        | $\vdash$ | Н        |
|             | 131               | $\vdash$ | ├─       | $\vdash$ | $\vdash$ |          | _        |          |          | Н        |
|             | 132               |          |          | $\vdash$ |          |          | _        | _        | $\vdash$ | Н        |
|             | 132<br>133        |          |          |          |          |          |          |          |          |          |
|             | 134               |          |          |          |          |          |          |          |          |          |
|             | 135               |          | _        |          | _        | _        | _        |          | <u> </u> | Ш        |
|             | 136               |          | -        | ┡        | <u> </u> | _        | _        | -        | <u> </u> |          |
| -           | 137<br>138        | $\vdash$ | ⊢        | ⊢        | ⊢        | H        | _        | -        | ├─       | Н        |
| <del></del> | 139               |          | $\vdash$ | ⊢        | ┢        |          |          | H        | $\vdash$ | H        |
| <u> </u>    | 140               |          | 一        | $\vdash$ |          |          | _        | H        | $\vdash$ | П        |
|             | 141               |          |          |          |          |          |          |          |          |          |
|             | 142               |          |          |          |          |          |          |          |          |          |
| <u> </u>    | 143               | L        | _        | $\vdash$ | <u> </u> | L        | <u> </u> | <u> </u> | <u> </u> | Ш        |
|             | 144               | <u> </u> | $\vdash$ | _        | $\vdash$ | <u> </u> | _        | _        | L        | Н        |
|             | 145<br>146        |          | $\vdash$ | $\vdash$ | -        | ├        | -        | -        | H        | Н        |
| <u> </u>    | 147               | -        | $\vdash$ | -        | $\vdash$ | -        | -        | -        | $\vdash$ | $\vdash$ |
|             | 148               | H        | $\vdash$ | $\vdash$ | -        | ┢        | $\vdash$ | -        | $\vdash$ | Н        |
|             | 149               | Т        | Г        | Г        | Т        | Т        | <u> </u> | $\vdash$ |          | М        |
|             | 150               |          |          |          |          |          |          |          |          |          |
|             |                   |          |          |          |          |          |          |          |          |          |